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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,298	01/31/2005	Cesare Fumo	2004_0997A	2538
513 7590 02/25/2008 WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021				
EXAMINER FLETCHER III, WILLIAM P				
ART UNIT		PAPER NUMBER		
1792				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/500,298

Applicant(s)

FUMO ET AL.

Examiner

William P. Fletcher III

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Amendment

1. The amendment and remarks filed November 5, 2007, are noted with appreciation.
2. Claims 44-61 are now pending.

Response to Arguments

3. The rejections under 35 USC 112, 2nd Paragraph, set forth at page 4, paragraphs 11A and 11B of the prior Office action, are withdrawn in view of the amendment.
4. The new claims continue to recite the phrase "surface interested area," rejected by the Examiner as indefinite in the prior Office action.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 44-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

A. The independent claims recite the phrase "surface interested area," which the Examiner identified as indefinite in the prior Office action. The meaning of this phrase, according to conventional English syntax, is unclear. Hence, the metes and bounds of the claimed subject matter is impossible to determine.

B. While claim 53 recites a "system" (i.e., an apparatus), claims 54-61, which depend from claim 53, recite a "method." It is impossible to determine whether

Applicant is claiming an apparatus (i.e., system) or a process. 35 USC 101 states: "Whosoever invents or discovers an new process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirement of this title." While a process claim may recite structural apparatus limitation; and an apparatus claim may recite limitations defining the use in a process of certain parts of the apparatus, the claims must clearly define either an apparatus (i.e., system) or a process to comply with 35 USC 101.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 44-49 and 53-58, are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez et al. (US 3,661,304 A) in view of Noguchi (US 6,428,862 B1).**

A. Martinez teaches an ink jet printing process and device in which a first pressure that is greater than a second pressure, is utilized to deliver the ink, operated in the fashion claimed by applicant. This reference is cited in the IDS and in the related international application.

i. While not expressly disclosed as under computer control, it is the Examiner's position that such would have been a readily obvious expedient to one skilled in the art.

ii. Further, while not expressly disclosed as cleaning by supplying a pressure, p3, greater than the first two, it is the Examiner's position that it would have been obvious to one skilled in the art to use compressed air, etc., in such a fashion to clean components of the system.

iii. Finally, while this reference teaches that the ink may be applied to a sheet substrate [circa 3:40], it does not expressly teach fastening the sheet to the support of the mobile bed. It is the Examiner's position that such would have been obvious to one skilled in the art as an obvious expedient for holding the sheet in place for the printing process.

B. Martinez does not expressly teach a polymerizable "electronically-interactive" material as the ink. Nevertheless, Martinez does not limit the types of inks that may be utilized and it is clear that the process/apparatus of Martinez

may advantageously utilize any known ink jet ink. Noguchi teaches an ink polymerizable by UV radiation [abstract]. It would have been obvious to one skilled in the art to modify the process/apparatus of Martinez so as to deposit the ink of Noguchi. One skilled in the art would have been motivated by the desire and expectation of successfully depositing the ink. Applicant's definition of "electronically-interactive" is so broad as to include all conducting and insulating (non-conducting) materials (see spec. page 1). Since a material is either conducting or non-conducting, the ink of Noguchi reads on this limitation.

C. With respect to the UV curing, Noguchi teaches that the UV source be as close as possible to the deposition source [paragraph bridging cols. 26-27]. Since attachment to the deposition source is the epitome of this teaching, it would have been readily obvious.

D. Finally, while not expressly taught, it is the Examiner's position that any known means for controlling/adjusting the process would have been obvious, including the claimed sensor and UV energy control.

Art Unit: 1792

10. **Claims 50-52 and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez et al. (US 3,661,304 A) and Noguchi, as applied to claims 44-46 and 53-55 above, further in view of JP 05-329423 A.**

A. Neither Martinez nor Noguchi expressly teaches the use of a television camera, as recited in this claim.

B. JP '423, cited in Applicant's IDS, teaches an ink jet printing process in which the process is controlled, in part, by use of a television camera.

C. As such, it would have been obvious to one skilled in the art to modify the process so as to utilize a television camera as such is known in the art.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. The prompt development of clear issues in the prosecution history requires that applicant's reply to this Office action be fully responsive (MPEP § 714.02). When filing an amendment, applicant should specifically point out the support for any amendment made to the disclosure, including new or amended claims (MPEP §§ 714.02 & 2163). A fully responsive reply to this Office action, if it includes new or amended claims, must therefore include an explicit citation (i.e., page number and line number) of that/those portion(s) of the original disclosure which applicant contends support(s) the new or amended limitation(s).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Sunday, 5:00 AM - 12:00 PM and Monday through Friday, 5:00 AM - 3:30 PM; on campus every Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1792

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William Phillip Fletcher III/

Primary Examiner

February 18, 2008